

# FIND YOUR WAY

Using multiplication only, find the trail of numbers that leads through each puzzle. Start in the box marked start and work your way to the total.

Start

8	1	5
4	5	2
3	3	2

480

Start

2	2	5
0	7	6
9	1	8

252

Start

5	1	0
2	2	8
4	2	1

80

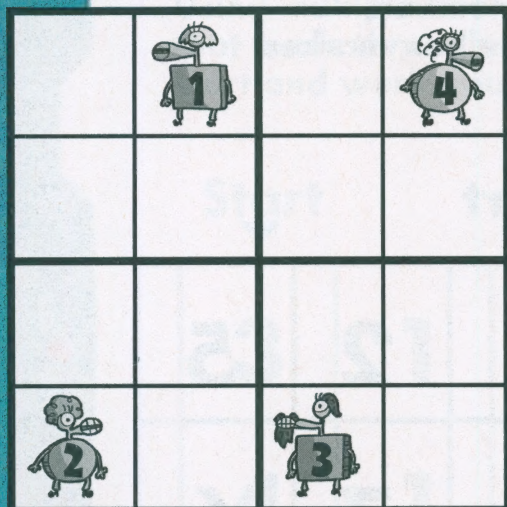
Start

2	3	3
2	6	7
4	5	2

180

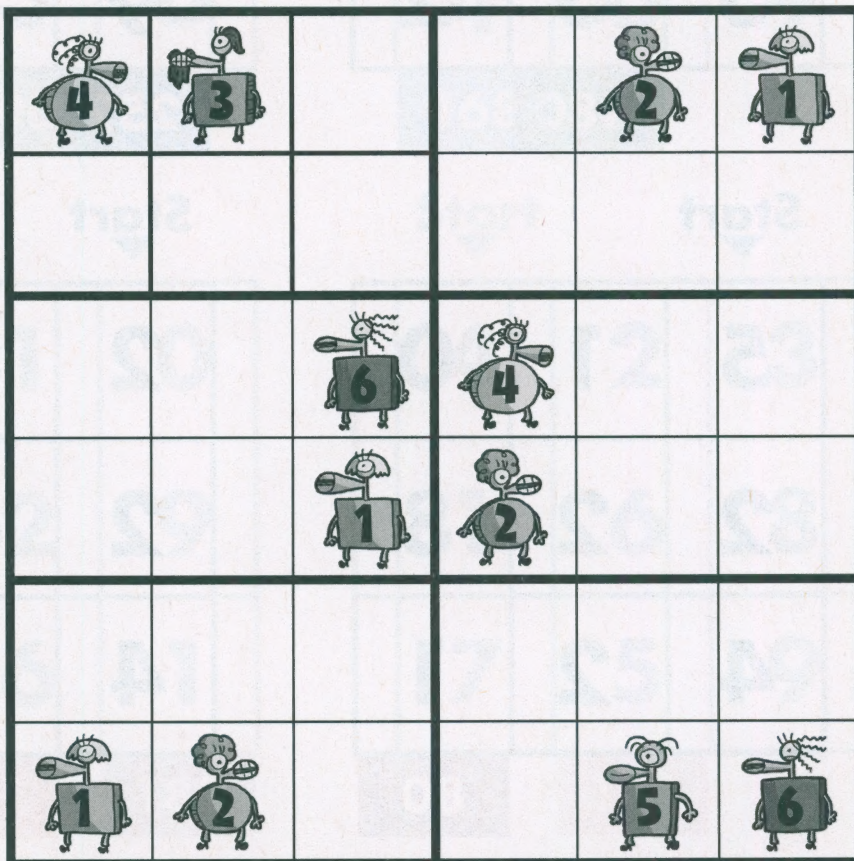
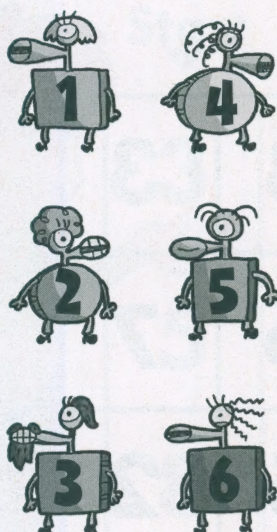


# PLAY CYBER-SUDOKU



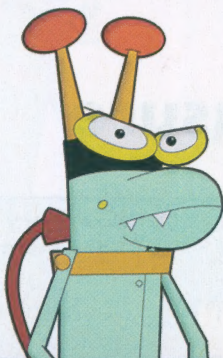
The Poddles of Poddleville have their own special game. In this game, only Poddles with numbers 1, 2, 3, and 4 can play. They each have to find a place in the box so they appear only once in each column, row, and box of four. Four of them are in position. Can you place the rest? Grab your pencil and give it a try!

In this game, Poddles with numbers 1, 2, 3, 4, 5, and 6 can play. They can appear only once in each column, row, and box of six. Are you up to the challenge?

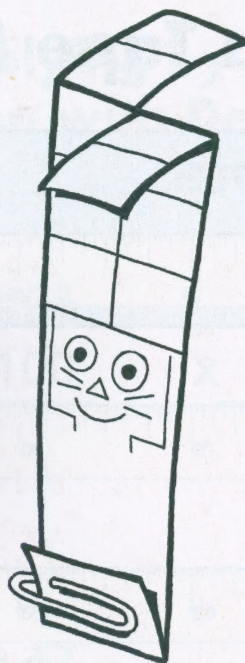




# BUNNY COPTER



Delete invented this Bunny Copter. Can you improve his invention so it twirls faster?

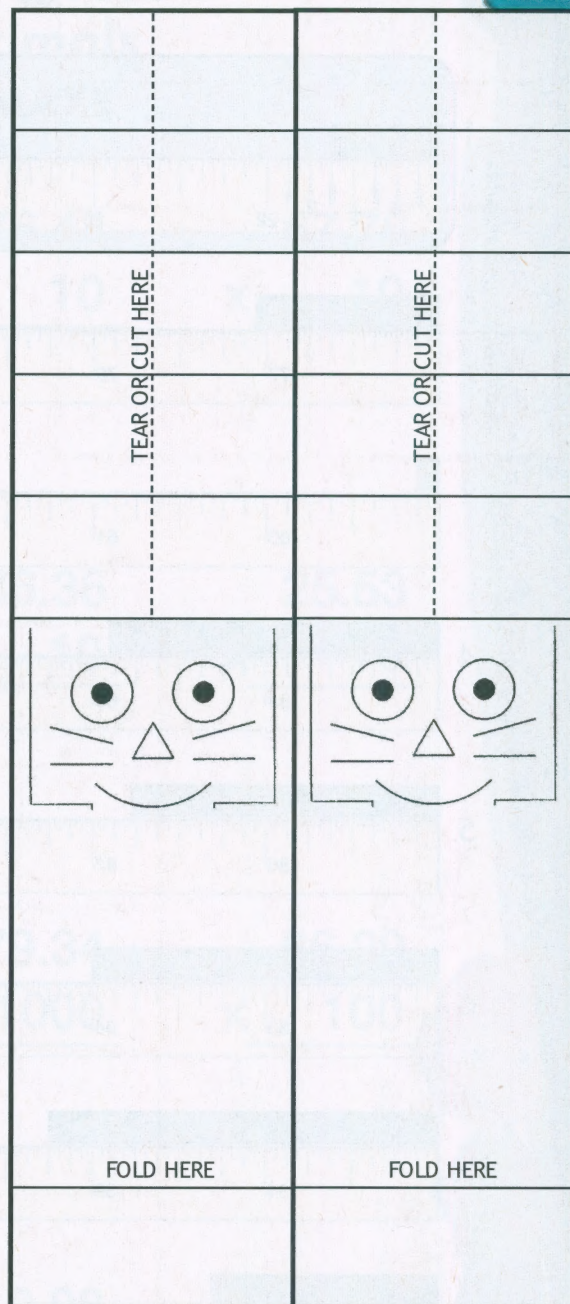


## YOU NEED

Bunny Copter strips\*  
2 paper clips  
crayons  
scissors

## DIRECTIONS

1. Color the bunny's faces, and cut out the strips.
2. Make Delete's invention! Starting at the top of a strip, count down two boxes. To make ears, cut along the dotted line to the solid line at the bottom of the second box. Fold one ear forward on the solid line. Fold the other back.
3. Make a place for Delete to ride. Fold up the bottom of the strip on the solid line. Attach Delete (a paper clip).
4. Test the invention! Hold up the copter and let it drop. How fast does it twirl before it hits the floor? Can you think of ways to change it so it twirls faster? What happens if you bend the ears the opposite way? Try another copter to test your ideas.



\* Make a copy of this page to make more strips.

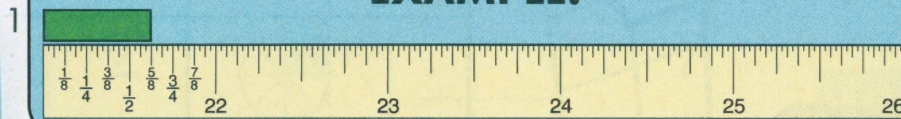


# MEASURE UP

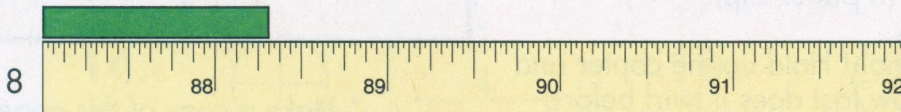
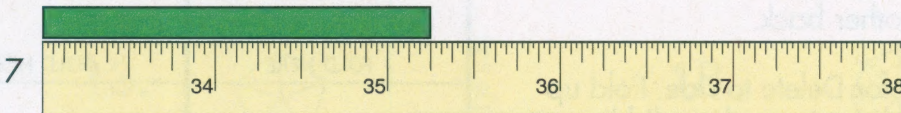
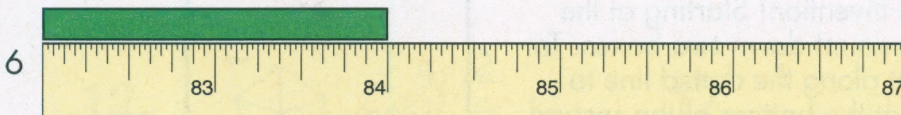
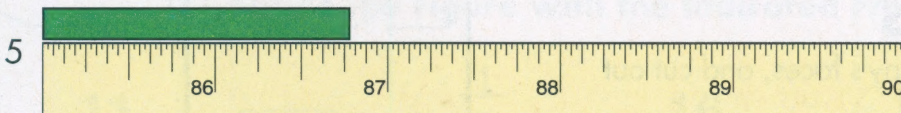
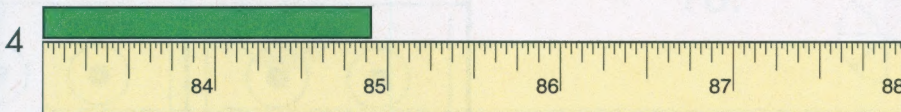
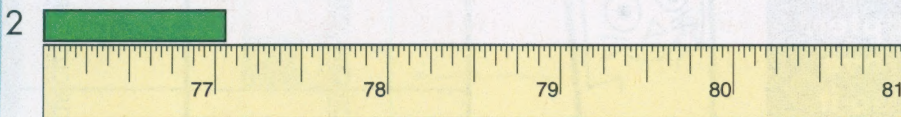
## Reading a Tape Measure

**EXAMPLE:**

How many feet(') and inches(")?



$1' - 9\frac{5}{8}"$





# MEASURE UP

Use this chart as a reference. In each problem below, circle the greater amount.

## CAPACITY:

1 PINT= 2 CUPS

1 QUART= 2 PINTS

4 CUPS= 1 QUART

1 GALLON= 4 QUARTS

## LENGTH:

1 FOOT= 12 INCHES

3 FEET= 1 YARD

1 MILE= 1760 YARDS

## TIME:

1 MINUTE= 60 SECONDS

1 HOUR= 60 MINUTES

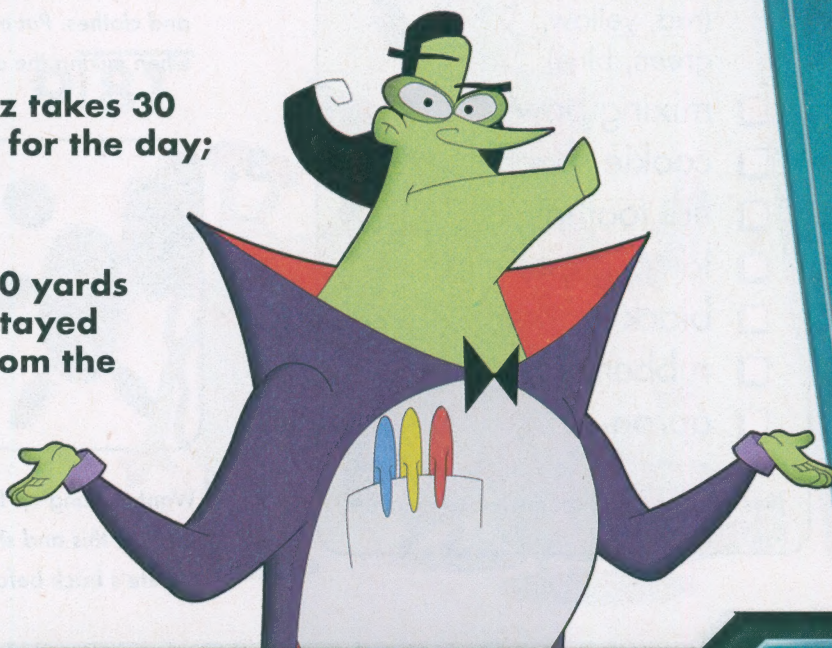
1 DAY= 24 HOURS

**Example:** Jackie swam 60 yards and Inez swam 100 feet.

1. For dinner, Matt made 15 gallons of chili and 24 quarts of potato soup.

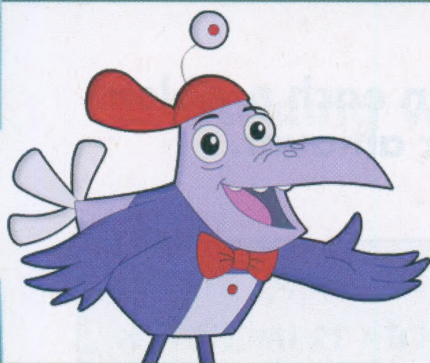
2. Each morning, Buzz takes 30 minutes to get ready for the day; Delete takes 1 hour.

3. Inez's cabin was 50 yards from the lake. Matt stayed in a cabin 200 feet from the same lake.





# Digit's Cyber-Dough



Digit has a cool recipe for Cyber-Dough. It's easy to make, fun to play with—and it has Hacker stumped! The recipe tells exactly how much salt to use, but Hacker can't figure out how much flour, water and oil to add. Can you?

## YOU NEED

- ☐ salt  
¼ cup, or 4 tablespoons
- ☐ flour  
4 times the measure of salt
- ☐ water  
same as the measure of salt
- ☐ vegetable oil  
½ the measure of salt
- ☐ food color  
(red, yellow, green, blue)
- ☐ mixing bowl
- ☐ cookie sheet
- ☐ flat toothpicks
- ☐ large paper clip
- ☐ black marker
- ☐ rubber gloves
- ☐ apron

(See answer pages for the recipe amounts.)

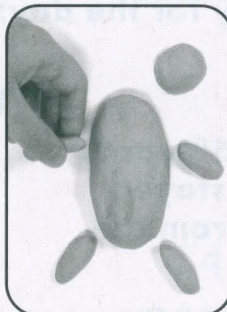
## Make Delete!



1. In a bowl, mix the salt and flour. Add water SLOWLY, then the oil. Mush the mixture with your fingers until it feels like clay and makes a ball. (If dough is too sticky, add a little flour. Too stiff? Add a little water.)
2. Break off about half of the dough and set it aside. Add five drops of blue food color and one drop of green to the other half of the dough in the bowl. Work the color into the dough until smooth.

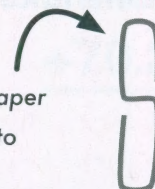
*BE CAREFUL: Food color may stain your fingers and clothes. Put on rubber gloves and an apron when mixing the colors.*

3.



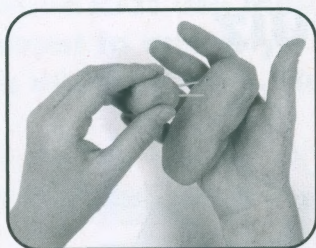
Make shapes for Delete's body. Make four small cylinders for his arms and legs, one large cylinder for his body, and one small ball for the front of his head as shown.

Want to hang up Delete? Bend a paper clip like this and stick the bottom into Delete's back before Step 4.

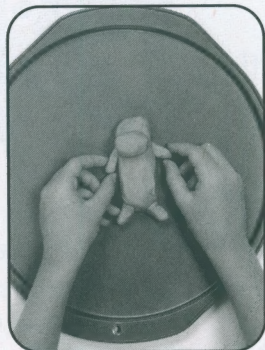




# Digit's Cyber-Dough

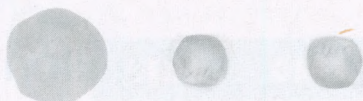


- 4.** Use two half-toothpicks to attach the front of Delete's head to his body.



- 5.** Attach the arms and legs by pressing them onto the body.

- 6.** From the uncolored dough you set aside before, break off a piece the size of a golf ball. Break off two more pieces the size of marbles.



- 7.** Color the balls with food color:



2 drops yellow



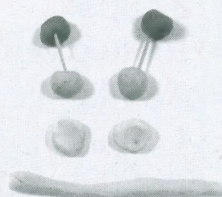
3 drops yellow + 1 drop red



no food color

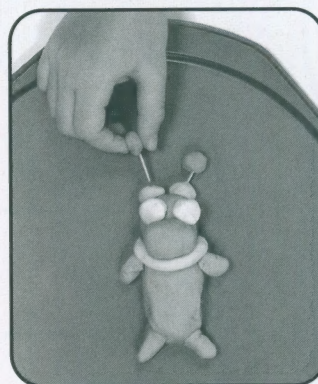
**NOTE:** Digit's Cyber-Dough is like clay and is not good to eat. Keep any leftover dough in the refrigerator for up to a week.

- 8.** Use the yellow ball to make Delete's collar and the two antenna bases. Use the orange ball to make the two antenna ends. Use the uncolored ball to make his two eyes.



antenna ends  
antenna bases  
eyes  
collar

- 9.** Attach the collar and eyes. Use toothpicks to attach each antenna to its base.



- 10.** Ask an adult to help you bake Delete. Bake him at 300° for 40 to 45 minutes, or until dry. Let cool. Use a black marker to add eyeballs, mouth, buttons, and boots.

**Hey, what about me?**

**Yes, even you BUZZ!**  
**Make all your favorite**  
**Cyberchase characters**  
**out of Cyber-Dough!**

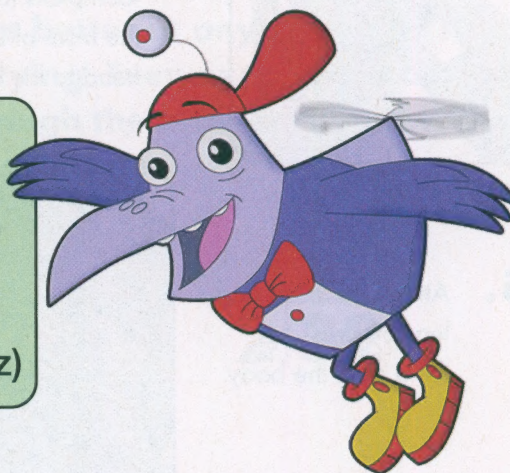




## Liquid Measure Quiz

### Standard Conversions

1 cup = 8 fluid ounces (fl oz)  
1 pint = 2 cups  
1 pint = 16 fluid ounces (fl oz)  
1 quart = 2 pints  
1 gallon = 4 quarts  
1 gallon = 128 fluid ounces (fl oz)



1. \_\_\_\_\_ gallon = 32 fl oz
2. \_\_\_\_\_ pints = 128 fl oz
3. 2 quarts = \_\_\_\_\_ gallon
4. \_\_\_\_\_ cups = 1 gallon
5. 1 cup = \_\_\_\_\_ pint
6. \_\_\_\_\_ pints = 64 fl oz
7. 8 cups = \_\_\_\_\_ quarts
8. \_\_\_\_\_ gallon = 64 fl oz



# CROSS-NUMBER PUZZLE

Complete the puzzle by solving each problem below.

1.	2.		3.	
		4.		6.
5.				
			7.	

## Area, Perimeter, and Volume

### Down:

1. The area of a square whose side is 6.
2. The volume of a cube whose side is 3.
3. The perimeter of a rectangle whose sides are 3 and 6.
4. The volume of a cube whose side is 4.
5. The area of a rectangle whose sides are 3 and 4.
6. The volume of a cube whose side is 5.

### Across:

1. The area of a rectangle whose sides are 8 and 4.
3. The length of the side of a square whose area is 100.
5. The area of a square whose side is 12.
7. The length of the side of a square whose area is 225.



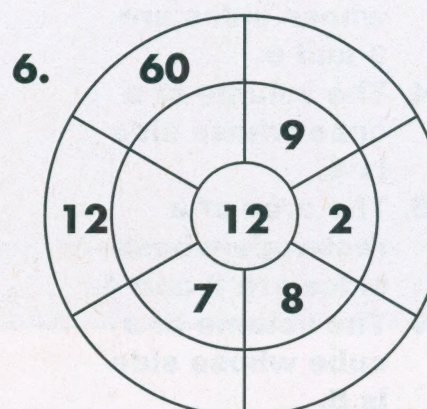
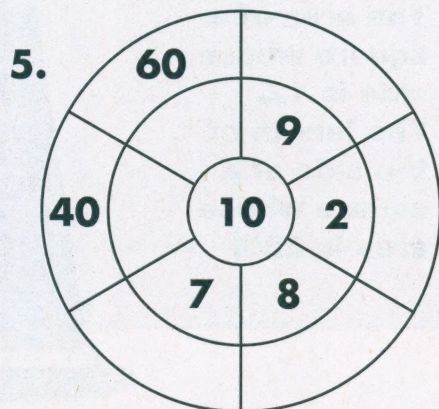
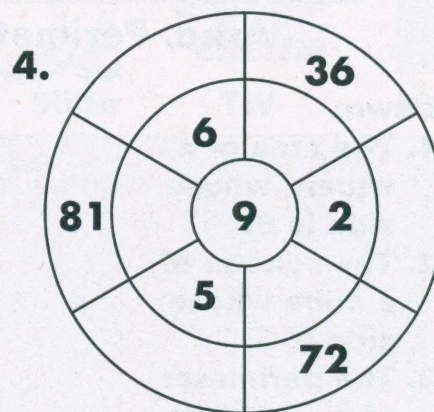
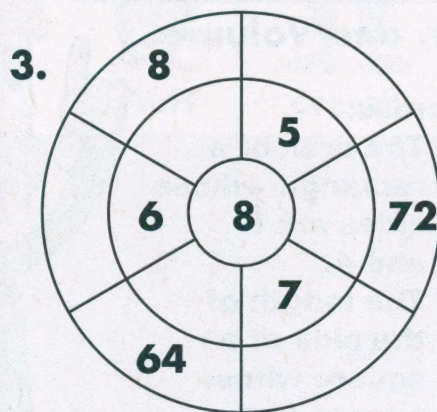
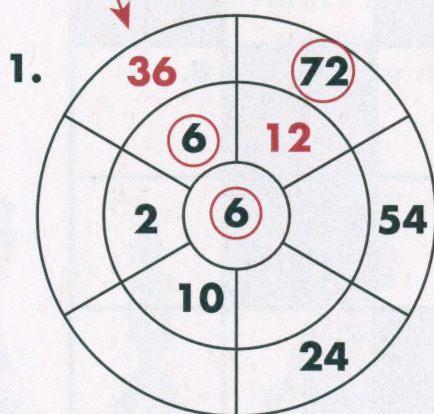


# TARGET CIRCLES

Multiply the number in the center by the middle ring to get the outer numbers.

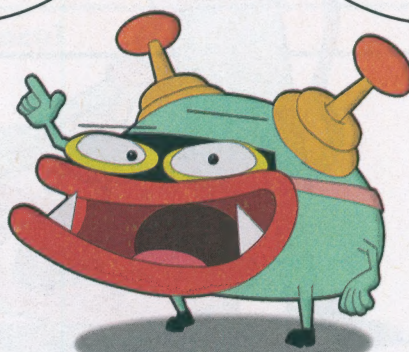
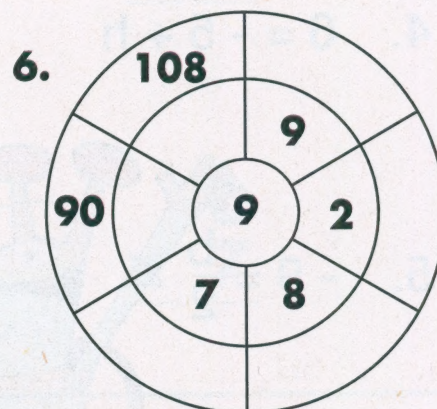
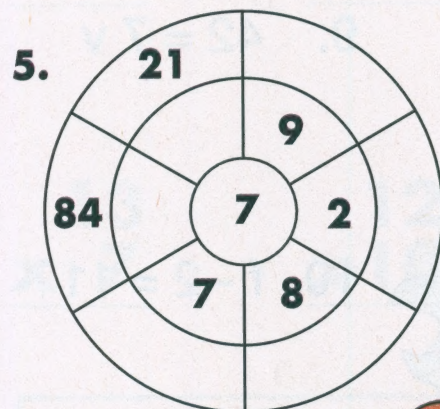
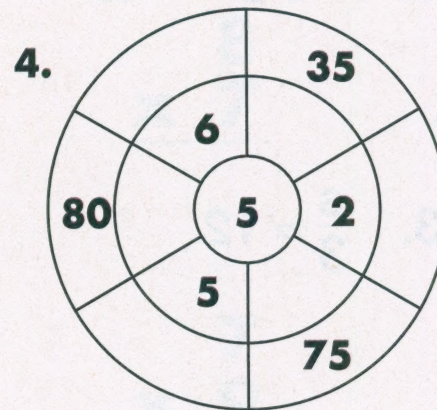
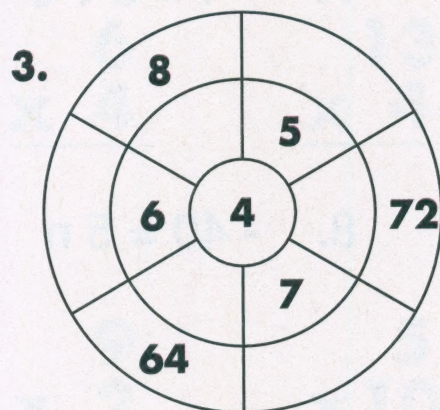
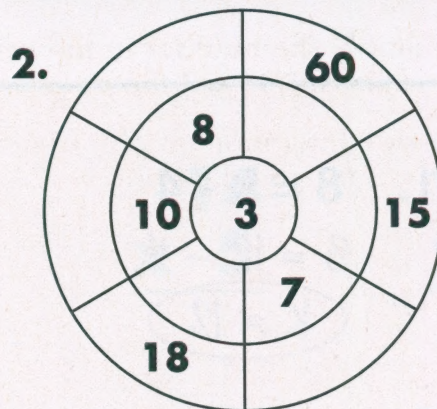
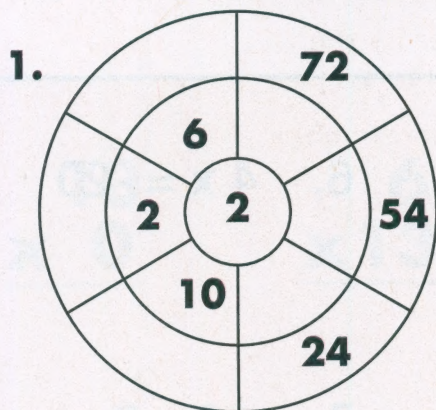
Divide the outer ring by the center number to get the middle numbers.

EXAMPLE:  $6 \times 6 = 36$   
 $72 \div 6 = 12$





# TARGET CIRCLES





# SOLVE THE EQUATIONS

1.  $8 = k - 4$

$8 = 12 - 4$

$k = 12$

6.  $4x = -20$

2.  $-5d = -45$

7.  $-4 = 3 + c$

3.  $\frac{s}{3} = 12$

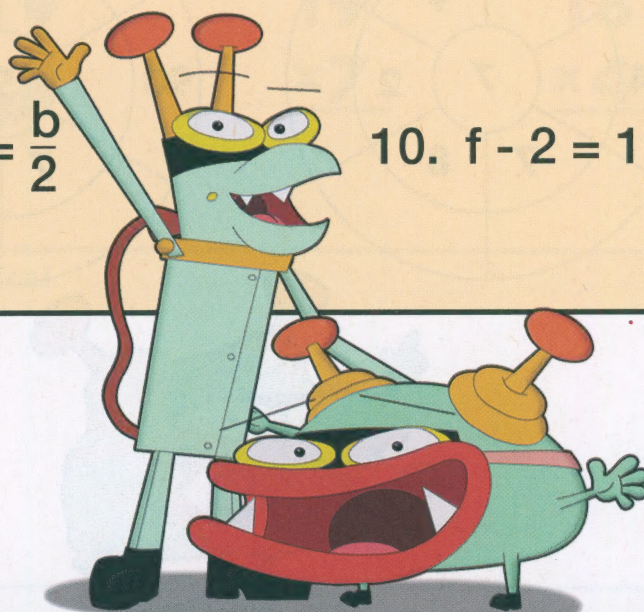
8.  $-40 = 5n$

4.  $6 = -5 + h$

9.  $42 = 7v$

5.  $-9 = \frac{b}{2}$

10.  $f - 2 = 11$





# SOLVE THE EQUATIONS

Matt just completed his homework and needs someone to check his answers! Work through each problem below. Then, circle any answers that are incorrect and write the correct answer next to it. Don't forget to show your work!

1.  $4X+13=17$   $X=$  1      2.  $4X+3=15$   $X=$  3

3.  $5X+20=30$   $X=$  10      4.  $X+9=14$   $X=$  5

5.  $X+6=11$   $X=$  5      6.  $X+13=14$   $X=$  1

7.  $4X+4=20$   $X=$  6      8.  $X-2=3$   $X=$  1

